

data for 1995, there were 1,082 establishments in this category that operated for the entire year."⁴¹⁰ Of these, 957 had employment of under 500, and 52 establishments had employment of 500 to 999.

153. *Electronic Capacitor Manufacturing.* These establishments manufacture "electronic fixed and variable capacitors and condensers."⁴¹¹ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees."⁴¹² According to Census Bureau data for 1997, there were 128 establishments in this category that operated for the entire year."⁴¹³ Of these, 121 had employment of under 200, and four establishments had employment of 500 to 999.

154. *Electronic Resistor Manufacturing.* These establishments manufacture "electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors."⁴¹⁴ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees."⁴¹⁵ According to Census Bureau data for 1997, there were 118 establishments in this category that operated for the entire year."⁴¹⁶ Of these, 113 had employment of under 500, and 5 establishments had employment of 500 to 999.

155. *Electronic Coil, Transformer, and Other Inductor Manufacturing.* These establishments manufacture "electronic inductors, such as coils and transformers."⁴¹⁷ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees."⁴¹⁸ According to Census Bureau data for 1995, there were 448 establishments in this category that operated for the entire year."⁴¹⁹ Of these, 446 had employment of under 500, and two establishments had employment of 500 to 999.

156. *Electronic Connector Manufacturing.* These establishments manufacture "electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic."⁴²⁰ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees."⁴²¹ According to Census Bureau data for 1997, there were 347

⁴¹⁰ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Semiconductor and Related Device Manufacturing," Table 4, NAICS code 334413 (issued July 1999).

⁴¹¹ U.S. Census Bureau, "2002 NAICS Definitions: 334414 Electronic Capacitor Manufacturing" (Feb. 2004) <www.census.gov>.

⁴¹² 13 C.F.R. § 121.201, NAICS code 334414.

⁴¹³ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Capacitor Manufacturing," Table 4, NAICS code 334414 (issued July 1999).

⁴¹⁴ U.S. Census Bureau, "2002 NAICS Definitions: 334415 Electronic Resistor Manufacturing" (Feb. 2004) <www.census.gov>.

⁴¹⁵ 13 C.F.R. § 121.201, NAICS code 334415.

⁴¹⁶ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Resistor Manufacturing," Table 4, NAICS code 334415 (issued Aug. 1999).

⁴¹⁷ U.S. Census Bureau, "2002 NAICS Definitions: 334416 Electronic Coil, Transformer, and Other Inductor Manufacturing" (Feb. 2004) <www.census.gov>.

⁴¹⁸ 13 C.F.R. § 121.201, NAICS code 334416.

⁴¹⁹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Coil, Transformer and Other Inductor Manufacturing," Table 4, NAICS code 334416 (issued Aug. 1999).

⁴²⁰ U.S. Census Bureau, "2002 NAICS Definitions: 334417 Electronic Connector Manufacturing" (Feb. 2004) <www.census.gov>.

⁴²¹ 13 C.F.R. § 121.201, NAICS code 334417.

establishments in this category that operated for the entire year.⁴²² Of these, 332 had employment of under 500, and 12 establishments had employment of 500 to 999.

157. *Printed Circuit Assembly (Electronic Assembly) Manufacturing.* These are establishments "primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards."⁴²³ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees."⁴²⁴ According to Census Bureau data for 1997, there were 714 establishments in this category that operated for the entire year."⁴²⁵ Of these, 673 had employment of under 500, and 24 establishments had employment of 500 to 999.

158. *Other Electronic Component Manufacturing.* These are establishments "primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards."⁴²⁶ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees."⁴²⁷ According to Census Bureau data for 1997, there were 1,835 establishments in this category that operated for the entire year."⁴²⁸ Of these, 1,814 had employment of under 500, and 18 establishments had employment of 500 to 999.

159. *Computer Storage Device Manufacturing.* These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media."⁴²⁹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees."⁴³⁰ According to Census Bureau data for 1997, there were 209 establishments in this category that operated for the entire year.⁴³¹ Of these, 197 had employment of under 500, and eight establishments had employment of 500 to 999.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

160. We are requiring telecommunications carriers and providers of interconnected VoIP service to collect certain information and take other actions to comply with our rules regarding the use of CPNI. For example, carriers must have an officer, as an agent of the carrier, sign and file with the Commission a compliance certificate on an annual basis stating that the officer has personal knowledge

⁴²² U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Connector Manufacturing," Table 4, NAICS code 334417 (issued July 1999).

⁴²³ U.S. Census Bureau, "2002 NAICS Definitions: 334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing" (Feb. 2004) <www.census.gov>.

⁴²⁴ 13 C.F.R. § 121.201, NAICS code 334418

⁴²⁵ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Printed Circuit Assembly (Electronic Assembly) Manufacturing," Table 4, NAICS code 334418 (issued Sept. 1999).

⁴²⁶ U.S. Census Bureau, "2002 NAICS Definitions: 334419 Other Electronic Component Manufacturing" (Feb. 2004) <www.census.gov>.

13 C.F.R. § 121.201, NAICS code 334419

⁴²⁸ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Other Electronic Component Manufacturing," Table 4, NAICS code 334419 (issued Aug. 1999).

⁴²⁹ U.S. Census Bureau, "2002 NAICS Definitions: 334112 Computer Storage Device Manufacturing" (Feb. 2004) <www.census.gov>.

⁴³⁰ 13 C.F.R. § 121.201, NAICS code 334112

⁴³¹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Computer Storage Device Manufacturing," Table 4, NAICS code 334112 (issued July 1999).

that the carrier has established procedures that are adequate to ensure compliance with the CPNI rules.⁴³² The carrier must also provide a statement accompanying the certificate explaining how its operating procedures ensure that it is or is not in compliance with the CPNI rules.⁴³³ Further, the carrier must include an explanation of any actions taken against data brokers and a summary of all consumer complaints received in the past year concerning the unauthorized release of CPNI.⁴³⁴ Additionally, carriers must obtain opt-in approval before sharing CPNI with their joint venture partners or independent contractors for the purposes of marketing communications-related services to customers.⁴³⁵ Also, carriers are required to maintain a record of any discovered breaches, notifications to the United States Secret Service (USSS) and the Federal Bureau of Investigation (FBI) regarding those breaches, as well as the USSS and FBI response to those notifications for a period of at least two years.⁴³⁶

161. We also impose other requirements on telecommunications carriers and providers of interconnected VoIP service. Specifically, the Order prohibits carriers from releasing call detail information over the phone during customer-initiated telephone calls except by those methods provided for in the Order.⁴³⁷ The Order also requires, with the exception of carriers that are small businesses, that carrier not permit customers to gain access to an online account without first properly authenticating the customer and, for subsequent access, without a customer password or response to a back-up authentication method for lost or forgotten passwords, neither of which may be based on a carrier prompt for readily available biographical information, or account information.⁴³⁸ For the rules pertaining to online carrier authentication, we provide carriers that satisfy the definition of a "small entity" or a "small business concern" under the RFA or SBA an additional six months to implement these rules.⁴³⁹

162. The Order also requires that carriers notify customers through a carrier-originated voicemail or text message to the telephone number of record, or by mail or email to the address of record whenever a password, customer response to a back-up means of authentication for lost or forgotten passwords, online account, or address of record is created or changed.⁴⁴⁰ Further, the Order requires that carriers notify the USSS and the FBI no later than seven days after a reasonable determination of a CPNI breach.⁴⁴¹

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

163. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather

⁴³² See Order at paras. 51-53.

⁴³³ See *id.* at para. 51.

⁴³⁴ See *id.*

⁴³⁵ See *id.* at paras. 37-50.

⁴³⁶ See *id.* at paras. 26-32.

⁴³⁷ See *id.* at paras. 13-23.

⁴³⁸ See *id.* at paras. 20-22.

⁴³⁹ See *id.* at para. 61.

⁴⁴⁰ See *id.* at para. 24.

⁴⁴¹ See *id.* at paras. 26-26.

than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.'''

164. The notices invited comment on a number of issues related to small entities. For example, the Commission sought comment on the effect the various proposals described in the *EPIC CPNI Notice* will have on small entities, and on what effect alternative rules would have on those entities.''' Additionally, the Commission invited comment on ways in which the Commission can achieve its goal of protecting consumers while at the same time impose minimal burdens on small telecommunications service providers.''' With respect to any of the Commission consumer protection regulations already in place, the Commission sought comment on whether it has adopted any provisions for small entities that the Commission should similarly consider in this proceeding? Specifically, it invited comment on whether the problems identified by EPIC were better or worse at smaller carriers.''' The Commission invited comment on whether small carriers should be exempt from password-related security procedures to protect CPNI.⁴⁴⁶ The Commission invited comment on the benefits and burdens of recording audit trails for the disclosure of CPNI on small carriers.''' The Commission invited comment on whether requiring a small carrier to encrypt its stored data would be unduly burdensome.⁴⁴⁸ The Commission solicited comment on the cost to a small carrier of notifying a customer upon release of CPNI.⁴⁴⁹ The Commission sought comment on whether the Commission should amend its rules to require carriers to file annual certifications concerning CPNI and whether this requirement should extend to **only** telecommunications carriers that are **not** small telephone companies as defined by the Small Business Administration, and whether small carriers should be subject to different CPNI-related obligations.'''

165. The Commission has considered each of the alternatives described above, and in today's Order, imposes minimal regulation on small entities to the extent consistent with its goal of ensuring that carriers and providers of interconnected VoIP service protect against the unauthorized release of CPNI. Specifically, the Commission extended the implementation date for the rules pertaining to online authentication by six months so that small businesses will have additional time to come into compliance with the Order's rules.⁴⁵¹

166. However, as stated above, we must assess the interests of small businesses in light of the overriding public interest of protecting against the unlawful release of CPNI. The Order discusses that **CPNI is made up of very personal data.**⁴⁵² Therefore, the Commission concluded that it was important for all telecommunications carriers and providers of interconnected VoIP service, including small businesses, to comply with the rules the Commission adopts in this Order six months after the Order's effective date or on receipt of OMB approval, as required by the Paperwork Reduction Act, whichever is later. For

⁴⁴² 5 U.S.C. § 603(c).

⁴⁴³ See Notice, 21 FCC Rcd at 1787-89, 1790-91, 1793, paras. 11, 12, 16, 18, 19, 23, 29, 30.

⁴⁴⁴ See *id.* at 1793, para. 30.

⁴⁴⁵ See *id.* at 1787-88, para. 11.

⁴⁴⁶ See *id.* at 1789, para. 16.

⁴⁴⁷ See *id.* at 1790, para. 18.

⁴⁴⁸ See *id.* at 1790, para. 19.

⁴⁴⁹ See *id.* at 1791, para. 23.

⁴⁵⁰ See *id.* at 1793, paras. 29-30.

⁴⁵¹ See Order at para. 61.

⁴⁵² See, e.g., *id.* at para. 5.

Appendix D

Initial Regulatory Flexibility Analysis

168. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁴⁵⁵ the Commission has prepared the present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities that might result from this Further Notice. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Further Notice provided above. The Commission will send a copy of the Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.⁴⁵⁶ In addition, the Further Notice and the IRFA (or summaries thereof) will be published in the Federal Register.⁴⁵⁷

A. Need for, and Objectives of, the Proposed Rules

169. In the Further Notice, we seek comment on what steps the Commission should take, if any, to expand its CPNI rules further, and whether it should expand the consumer protections to ensure that customer information and CPNI are protected in the context of mobile communications devices. In particular, we seek comment on whether the Commission should adopt any further carrier requirements to protect CPNI, including password protection, audit trails, physical security, and limits on data retention.⁴⁵⁸ Further, we seek comment on what methods carriers currently use, if any, for erasing customer information on mobile equipment prior to refurbishing the equipment, and the extent to which carriers enable customers to permanently erase their personal information prior to discarding the device.⁴⁵⁹ We also seek comment on whether the Commission should require carriers or manufacturers to permanently erase, or allow customers to permanently erase, customer information in such circumstances.⁴⁶⁰ For each of these issues, we seek comment on the burdens, including those placed on small carriers, associated with corresponding Commission rules related to each issue.⁴⁶¹

B. Legal Basis

170. The legal basis for any action that may be taken pursuant to this Further Notice is contained in sections 1, 4(i), 4(j), and 222 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 222.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

171. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules.⁴⁶² The RFA generally defines the

⁴⁵⁵ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁴⁵⁶ See 5 U.S.C. § 603(a).

⁴⁵⁷ See 5 U.S.C. § 603(a).

⁴⁵⁸ See Further Notice at paras. 68-70.

⁴⁵⁹ See *id.* at para. 72.

⁴⁶⁰ See *id.*

⁴⁶¹ See *id.* at paras. 68-71.

⁴⁶² 5 U.S.C. §§ 603(b)(3), 604(a)(3).

exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

176. *Incumbent Local Exchange Carriers (LECs).* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁷³ According to Commission data,⁴⁷⁴ 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our action.

177. *Competitive Local Exchange Carriers, Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁷⁵ According to Commission data,⁴⁷⁶ 769 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 769 carriers, an estimated 676 have 1,500 or fewer employees and 93 have more than 1,500 employees. In addition, 12 carriers have reported that they are "Shared-Tenant Service Providers," and all 12 are estimated to have 1,500 or fewer employees. In addition, 39 carriers have reported that they are "Other Local Service Providers." Of the 39, an estimated 38 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities that may be affected by our action.

178. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁷⁷ According to Commission data,⁴⁷⁸ 143 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 141 have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by our action.

179. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁷⁹ According to Commission data,⁴⁸⁰ 770 carriers have reported that they are engaged in the

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SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

⁴⁷³ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

⁴⁷⁴ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (April 2005) ("Trends in Telephone Service"). This source uses data that are current as of October 1, 2004.

⁴⁷⁵ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

⁴⁷⁶ "Trends in Telephone Service" at Table 5.3.

⁴⁷⁷ 13 C.F.R. § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

⁴⁷⁸ "Trends in Telephone Service" at Table 5.3.

⁴⁷⁹ 13 C.F.R. § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

term "small entity" as having the same meaning as the term; "small business," "small organization," and "small governmental jurisdiction."⁴⁶³ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁴⁶⁴ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁴⁶⁵

172. *Small Businesses.* Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.⁴⁶⁶

173. *Small Organizations.* Nationwide, there are approximately 1.6 million small organizations.⁴⁶⁷

174. *Small Governmental Jurisdictions.* The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."⁴⁶⁸ Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.⁴⁶⁹ We estimate that, of this total, 84,377 entities were "small governmental jurisdictions." Thus, we estimate that most governmental jurisdictions are small.

1. Telecommunications Service Entities

a. Wireline Carriers and Service Providers

175. We have included small incumbent local exchange carriers in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."⁴⁷¹ The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not "national" in scope.⁴⁷² We have therefore included small incumbent **local**

⁴⁶³ 5 U.S.C. § 601(6).

⁴⁶⁴ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

⁴⁶⁵ 15 U.S.C. § 632.

⁴⁶⁶ See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

⁴⁶⁷ Independent Sector, The New Nonprofit Almanac & Desk Reference (2002)

⁴⁶⁸ 5 U.S.C. § 601(5).

⁴⁶⁹ U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, page 272, Table 415.

⁴⁷⁰ We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, Statistical Abstract of the United States: 2006, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

⁴⁷¹ 15 U.S.C. § 632

⁴⁷² Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA).

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Commission estimates that all or the majority of pi-paid calling cat-d providers are small entities that may be affected by our action.

184. *800 and 800-Like Service Subscribers.*⁴⁸⁹ Neither the Commission nor the SBA has developed a small business size standard specifically for 800 and 800-like service ("toll free") subscribers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁹⁰ The most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, and 877 numbers in use.⁴⁹¹ According to our data, at the end of January, 1999, the number of 800 numbers assigned was 7,692,955; the number of 888 numbers assigned was 7,706,393; and the number of 577 numbers assigned was 1,946,538. We do not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small businesses under the SBA size standard. Consequently, we estimate that there are 7,692,955 or fewer small entity 800 subscribers; 7,706,393 or fewer small entity 888 subscribers; and 1,946,538 or fewer small entity 877 subscribers.

b. International Service Providers

185. The Commission has **not** developed a small business size standard specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad census categories of "Satellite Telecommunications" and "Other Telecommunications." Under **both** categories, such a business is small if it has \$12.5 million or less in average annual receipts.⁴⁹²

186. The first category of Satellite Telecommunications "comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."⁴⁹³ For this category, Census Bureau data for 2002 show that there were a total of **371** firms that operated for the entire year.⁴⁹⁴ Of this **total**, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.⁴⁹⁵ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected **by** our action.

187. The second category of Other Telecommunications "comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and

⁴⁸⁹ We include all toll-free number subscribers in this category, including those for 888 numbers.

⁴⁹⁰ 13 C.F.R. § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

⁴⁹¹ See FCC, Common Carrier Bureau, Industry Analysis Division, *Study on Telephone Trends*, Tables 21.2.2.1.3, and 21.4 (Feb. 1999).

⁴⁹² 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

⁴⁹³ U.S. Census Bureau, "2002 NAICS Definitions: 517410 Satellite Telecommunications" (www.census.gov), visited Feb. 2006).

⁴⁹⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, **NAICS** code 517410 (issued Nov. 2005).

⁴⁹⁵ *Id.* An additional 38 firms had annual receipts of \$25 million or more.

provision of toll resale services. Of these, an estimated 747 have 1,500 or fewer employees and 23 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

180. *Payphone Service Providers (PSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁸¹ According to Commission data,⁴⁸² 613 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 609 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

181. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁸³ According to Commission data,⁴⁸⁴ 316 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 292 have 1,500 or fewer employees and 24 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our action.

182. *Operator Service Providers (OSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁸⁵ According to Commission data,⁴⁸⁶ 23 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 20 have 1,500 or fewer employees and three have more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our action.

183. *Prepaid Calling Card Providers*. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁸⁷ According to Commission data,⁴⁸⁸ 89 carriers have reported that they are engaged in the provision of prepaid calling cards. Of these, 88 are estimated to have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the

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⁴⁸⁰ "Trends in Telephone Service" at Table 5.3.

⁴⁸¹ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

⁴⁸² "Trends in Telephone Service" at Table 5.3.

⁴⁸³ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

⁴⁸⁴ "Trends in Telephone Service" at Table 5.3.

⁴⁸⁵ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

⁴⁸⁶ "Trends in Telephone Service" at Table 5.3.

⁴⁸⁷ 13 C.F.R. § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

⁴⁸⁸ "Trends in Telephone Service" at Table 5.3.

there were 1,397 firms in this category that operated for the entire year.⁵⁰⁶ Of this **total**, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁰⁷ Thus, under this category and size standard, the great majority of firms can be considered **small**. **Also**, according to Commission data, 437 carriers reported that they **were** engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.⁵⁰⁸ We have estimated that 260 of these are small, under the **SBA** small business size standard.⁵⁰⁹

191. *Common Carrier Paging*. The **SBA** has developed a small business size standard for wireless firms within the broad economic census category, "Cellular and Other Wireless Telecommunications."⁵¹⁰ Under this **SBA** category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census **Bureau** data for 2002 show that there were 807 firms in this category that operated for the entire year.⁵¹¹ Of this **total**, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁵¹² Thus, under this category and associated small business size standard, the majority of firms can be considered small. **In** the Paging *Third Report and Order*, **we** developed a small business size standard for "**small businesses**" and "**very small businesses**" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁵¹³ A "small business" is an entity that, together with its affiliates and controlling principals, has **average** gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.⁵¹⁴ The **SBA** has approved these small business size standards.⁵¹⁵ An auction of Metropolitan Economic **Area** licenses commenced on February 24, 2000, and closed on March 2, 2000.⁵¹⁶ Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. **Also**, according to Commission data, 375 carriers reported that they were engaged in the provision of paging

⁵⁰⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517212 (issued November 2005).

⁵⁰⁷ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵⁰⁸ "Trends in Telephone Service" at Table 5.3

⁵⁰⁹ *Id.*

⁵¹⁰ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁵¹¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517211 (issued November 2005).

⁵¹² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵¹³ *Amendment of Part 101 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295, 62 FR 16004 (Apr. 3, 1997).

⁵¹⁴ *See* Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (SBA Dec. 2, 1998 **Letter**).

⁵¹⁵ *Revision of Part 22 and Part 101 of the Commission's Rules to Facilitate Future Development of Paging Systems*, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, paras. 98-107 (1999).

⁵¹⁶ *Id.* at 10085, para. 98

capable of transmitting telecommunications to or receiving telecommunications from satellite systems.”⁴⁹⁶ For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.⁴⁹⁷ Of this total, 259 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.⁴⁹⁸ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

c. Wireless Telecommunications Service Providers

188. Below, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

189. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of “Paging”⁴⁹⁹ and “Cellular and Other Wireless Telecommunications.”⁵⁰⁰ Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.” Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.” Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵⁰³ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁰⁴ Thus, under this second category and size standard, the majority of firms can, again, be considered small.

190. *Cellular Licensees.* The SBA has developed a small business size standard for wireless firms within the broad economic census category “Cellular and Other Wireless Telecommunications.”⁵⁰⁵ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that

⁴⁹⁶ U.S. Census Bureau, “2002 NAICS Definitions: 517910 Other Telecommunications” (www.census.gov, visited Feb. 2006).

⁴⁹⁷ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517910 (issued Nov. 2005).

⁴⁹⁸ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

⁴⁹⁹ 13 C.F.R. § 121.201, NAICS code 513321 (changed to 517211 in October 2002).

⁵⁰⁰ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁵⁰¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517211 (issued November 2005).

⁵⁰² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees: the largest category provided is firms with “1000 employees or more.”

⁵⁰³ U.S. Census Bureau, 2002 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517212 (issued November 2005).

⁵⁰⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees: the largest category provided is firms with “1000 employees or more.”

⁵⁰⁵ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁵²⁶ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.⁵²⁷ In the future, the Commission will auction 359 licenses to serve Metropolitan Trading Areas (MTAs) and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future auctions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined. The Commission assumes, for purposes of this analysis that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

195. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁵²⁸ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).⁵²⁹ The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.⁵³⁰ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

196. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁵³¹ We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.⁵³² There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

197. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.⁵³³ There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business

⁵²⁶ *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket No. ET 92-100, Docket No. PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456, 65 FR 35875 (June 6, 2000).

⁵²⁷ See SBA Dec. 2, 1998 Letter.

⁵²⁸ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

⁵²⁹ BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

⁵³⁰ 13 C.F.R. § 121.201, NAICS code 517212.

⁵³¹ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

⁵³² 13 C.F.R. § 121.201, NAICS code 517212.

⁵³³ This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

and messaging services.⁵¹⁷ Of those, we estimate that 370 are small, under the SBA-approved small business size standard.⁵¹⁸

192. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for “Cellular and Other Wireless Telecommunications” services.” Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.” According to Commission data, 445 carriers reported that they were engaged in the provision of wireless telephony.⁵²¹ We have estimated that 24.5 of these are small under the SBA small business size standard.

193. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined “small entity” for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.” For Block F, an additional classification for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.” These standards defining “small entity” in the context of broadband PCS auctions have been approved by the SBA.⁵²⁴ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁵²⁵ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 1.5 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

194. *Narrowband Personal Communications Services.* To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of

⁵¹⁷ “Trends in Telephone Service” at Table 5.3.

⁵¹⁸ *Id.*

⁵¹⁹ 13 C.F.R. § 121.201. NAICS code 513322 (changed to 517212 in October 2002).

⁵²⁰ *Id.*

⁵²¹ “Trends in Telephone Service” at Table 5.3.

⁵²² See *Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap.* WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (*PCS Order*); see also 47 C.F.R. § 24.720(b).

⁵²³ See *PCS Order*, 11 FCC Rcd 7824.

⁵²⁴ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

⁵²⁵ FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 7 17-14 (rel. Jan. 14, 1997); see also *Amendment of the Commission’s Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

with **entities** whose gross annual revenues exceed \$2.50 million.”⁵⁴⁴ and therefore is unable, at this time, to estimate more accurately **the** number of cable system operators that would qualify as small cable operators under the size standard contained in the Communications Act of 1934.

201. *Open Video Services.* Open Video Service (OVS) systems provide subscription services.⁵⁴⁵ The SBA has created a small business size standard for Cable and Other Program Distribution.⁵⁴⁶ This standard provides that a small entity is one with \$12.5 million or less in annual receipts. The Commission has certified approximately 25 OVS operators to serve 75 areas, and some of these are currently providing service.⁵⁴⁷ Affiliates of Residential Communications Network, Inc. (RCN) received approval to operate OVS systems in New York City, Boston, Washington, D.C., and other areas. RCN has sufficient revenues to assure that they do not qualify as a **small** business entity. Little financial information is available for the other entities that are authorized to provide OVS and are not yet operational. Given that some entities authorized to provide OVS service have not yet begun to generate revenues, the Commission concludes that up to 24 OVS operators (those remaining) might qualify as small businesses that may be affected by the rules and policies adopted herein.

3. Internet Service Providers

202. *Internet Service Providers.* The SBA has developed a small **business** size standard for Internet Service Providers (ISPs). ISPs “provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity.”⁵⁴⁸ Under the SBA size standard, such a business is small if it **has** average annual receipts of \$21 million or less.⁵⁴⁹ According to Census Bureau data for 2002, there were 2,529 firms in this category that operated for the entire year.⁵⁵⁰ Of these, 2,437 firms had annual receipts of under \$10 million, and 47 firms had receipts of \$10 million or more **but** less than \$25 million.” Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

203. *All Other Information Services.* “This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives).”⁵⁵¹ The SBA has developed a small business size standard for this category; that **size** standard is \$6 million or less in average annual receipts.” According to Census Bureau data for **1997**, there were 195 firms in

⁵⁴⁴ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission’s rules. See 47 C.F.R. § 76.909(b).

⁵⁴⁵ See 47 U.S.C. § 573.

⁵⁴⁶ 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

⁵⁴⁷ See <<http://www.fcc.gov/csb/ovs/csovsccr.html>> (current as of March 2002).

⁵⁴⁸ U.S. Census Bureau, “2002 NAICS Definitions: 518111 Internet Service Providers” (Feb. 2004) <www.census.gov>.

⁵⁴⁹ 13 C.F.R. § 121.201, NAICS code 518111 (changed from previous code 514191, “On-Line Information Services,” in Oct. 2002).

⁵⁵⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 518111 (issued November 2005).

⁵⁵¹ *Id.* An additional 45 firms had annual receipts of \$25 million or more.

⁵⁵² U.S. Census Bureau, “2002 NAICS Definitions: 519190 All Other Information Services” (Feb. 2004) <www.census.gov>.

⁵⁵³ 13 C.F.R. § 121.201, NAICS code 519190 (changed from 514199 in Oct. 2002).

size standard for "Cellular and Other Wireless Telecommunications" services? Under that **SBA** small business size standard, a business **is small** if it has 1,500 or fewer employees.⁵³⁵

2. Cable and OVS Operators

198. **Cable and Other Program Distribution.** This category includes cable systems operators, closed circuit television services, direct **broadcast** satellite services, multipoint distribution systems, satellite master antenna **systems**, and subscription television services. The **SBA** has developed **small business size** standard for this census category, which includes all such companies generating \$12.5 million or less in revenue annually.⁵³⁶ According to Census Bureau data for 2002, there were a total of 1,191 firms in this category that operated for the entire year.⁵³⁷ Of this total, 1,087 firms had annual receipts of under \$10 million, and 43 firms had receipts of \$10 million or more but less than \$25 million.⁵³⁸ Consequently, the Commission estimates that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein.

199. **Cable System Operators.** The Commission has developed its own small business size standards for cable system operators, for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.⁵³⁹ In addition, a "small system" is a system serving 15,000 or fewer subscribers.⁵⁴⁰

200. **Cable System Operators (Telecom Act Standard).** The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which **is** "a cable operator that, directly or through an affiliate, serves **in** the aggregate fewer **than** 1 percent of all subscribers **in** the United States and is not affiliated with **any** entity or entities whose gross annual revenues **in** the aggregate exceed \$250,000,000."⁵⁴¹ The Commission has determined that there are approximately 67,700,000 subscribers **in** the United States.⁵⁴² Therefore, **an** operator serving fewer than 677,000 subscribers shall be deemed a small operator, **if** its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million **in the aggregate**.⁵⁴³ **Based on available data**, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,450. The Commission neither requests nor collects information on whether cable system operators are affiliated

⁵³⁴ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁵³⁵ *Id.*

⁵³⁶ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 513220 (changed to 517510 in October 2002).

⁵³⁷ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 517510 (issued November 2005).

⁵³⁸ *Id.* An additional 61 firms had **annual** receipts of \$25 million or more.

⁵³⁹ 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rare Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

⁵⁴⁰ 47 C.F.R. § 76.901(c).

⁵⁴¹ 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn. 1-3.

⁵⁴² See Public Notice, *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, DA 01-158 (Cable Services Bureau, Jan. 24, 2001).

⁵⁴³ 47 C.F.R. § 76.901(f).

Bureau data for 1997, there were 598 establishments in this category that operated for the entire year.⁵⁶³ Of these, 574 had employment of under 1,000, and an additional 17 establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

206. *Semiconductor and Related Device Manufacturing.* These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media." The SBA has developed a small business size standard for this category of manufacturing: that size standard is 500 or fewer employees.⁵⁶⁴ According to Census Bureau data for 1997, there were 1,082 establishments in this category that operated for the entire year.⁵⁶⁵ Of these, 987 had employment of under 500, and 52 establishments had employment of 500 to 999.

207. *Computer Storage Device Manufacturing.* These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media." The SBA has developed a small business size standard for this category of manufacturing: that size standard is 1,000 or fewer employees.⁵⁶⁶ According to Census Bureau data for 1997, there were 209 establishments in this category that operated for the entire year.⁵⁶⁷ Of these, 197 had employment of under 500, and eight establishments had employment of 500 to 999.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

208. Should the Commission decide to adopt any further regulations to ensure that all providers of telecommunication services meet consumer protection needs in regard to CPNI, including the security of the privacy of customer information stored in mobile communications devices, the associated rules potentially could modify the reporting and recordkeeping requirements of certain telecommunications providers. We could, for instance, require that telecommunications providers require further customer password-related security procedures to access CPNI data.⁵⁷⁰ We could also require telecommunications providers to track customer contact through the use of audit trails or to limit their retention of data related to CPNI.⁵⁷¹ Additionally, we could require additional physical safeguards be implemented to protect the transfer of CPNI.⁵⁷² Further, we could require telecommunications providers and/or manufacturers to configure wireless devices so consumers can easily and permanently delete

⁵⁶³ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Telephone Apparatus Manufacturing," Table 4, NAICS code 334210 (issued Sept. 1999).

⁵⁶⁴ U.S. Census Bureau, "2002 NAICS Definitions: 334413 Semiconductor and Related Device Manufacturing" (Feb. 2004) <www.census.gov>.

⁵⁶⁵ 13 C.F.R. § 121.201, NAICS code 334413.

⁵⁶⁶ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Semiconductor and Related Device Manufacturing," Table 4, NAICS code 334413 (issued July 1999).

⁵⁶⁷ U.S. Census Bureau, "2002 NAICS Definitions: 334112 Computer Storage Device Manufacturing" (Feb. 2004) <www.census.gov>.

⁵⁶⁸ 13 C.F.R. § 121.201, NAICS code 334112.

⁵⁶⁹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Computer Storage Device Manufacturing," Table 4, NAICS code 334112 (issued July 1999).

⁵⁷⁰ See Further Notice at para. 68.

⁵⁷¹ See Further Notice at paras. 69, 71.

⁵⁷² See Further Notice at para. 70.

this category that operated for the entire year.⁵⁵⁴ Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

4. Equipment Manufacturers

204. *Wireless Communications Equipment Manufacturers.* The SBA has established a small business size standard for Radio and Television Broadcasting and Wireless **Communications** Equipment Manufacturing. Examples of products in this category include "transmitting and receiving **antennas**, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and **television** studio and broadcasting equipment"⁵⁵⁵ and may include other devices that transmit and receive IP-enabled services, such as personal digital assistants (PDAs). Under the SBA size standard, firms are considered small if they have 750 or fewer employees.⁵⁵⁶ According to **Census** Bureau data for 1997, there were 1,215 establishments⁵⁵⁷ in this category that operated for the entire year.⁵⁵⁸ Of those, there were 1,150 that had employment of under 500, and an additional 37 that had employment of 500 to 999. The percentage of wireless equipment manufacturers in this category was approximately 61.35%.⁵⁵⁹ so we estimate that the number of wireless equipment manufacturers with employment of under 500 was actually closer to 706, with an additional 23 establishments having employment of between 500 and 999. Consequently, we estimate that the majority of wireless *communications equipment manufacturers* are small entities that may be affected by our action.

205. *Telephone Apparatus Manufacturing.* This category "comprises establishments primarily engaged primarily in manufacturing wire telephone and data communications **equipment**."⁵⁶⁰ Examples of pertinent products are "central office switching **equipment**, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as **bridges, routers, and gateways**."⁵⁶¹ The SBA has developed a small business size standard for this category of manufacturing: that size standard is 1,000 or fewer employees.⁵⁶² According to **Census**

⁵⁵⁴ U.S. Census Bureau. **1997 Economic Census**. Subject Series: Information. "Establishment and Firm Size (Including Legal Form of Organization)." Table 4. NAICS code 5 **14199** (issued Oct. 2000). This category was created for the **2002 Economic Census** by taking a portion of the superseded **1997** category, "All Other Information Services." NAICS code **514199**. The data cited in the text above are derived from the superseded category.

⁵⁵⁵ Office of Management and Budget. North American Industry Classification System **308-09 (1997)** (NAICS code **334220**).

⁵⁵⁶ 13 C.F.R. § 121.201. NAICS code **334220**.

⁵⁵⁷ The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for **firms** or companies only to give the **total** number of such entities for **1997**, which were 1,089.

⁵⁵⁸ U.S. Census Bureau. **1997 Economic Census**. Industry Series: Manufacturing. "Industry Statistics by Employment Size." Table 4. NAICS code **334220** (issued Aug. 1999).

⁵⁵⁹ *Id.* Table 5.

⁵⁶⁰ Office of Management and Budget. North American Industry Classification System **308 (1997)** (NAICS code **334210**).

⁵⁶¹ *Id.*

⁵⁶² 13 C.F.R. § 121.201. NAICS code **334210**.

**STATEMENT OF
CHAIRMAN KEVIN J. MARTIN**

Re: Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information: IP-Enabled Services, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 96-115 and WC Docket No. 04-36

The unauthorized disclosure of consumers' private calling records is a significant privacy invasion. Today, the Commission significantly strengthens the Commission's existing safeguards and takes a strong approach to protecting consumer privacy.

The Commission has **taken** numerous steps to combat these alarming breaches of the privacy of consumers' telephone records. We investigated so-called "data brokers" to determine how they are obtaining this information, and levied forfeitures **against** companies that failed to respond to our subpoenas and requests for information. We also investigated telecommunications carriers to determine whether they had implemented appropriate safeguards, and issued Notices of Apparent Liability against carriers that failed to comply with the Commission's rules.

The Order we adopt prohibits carriers from releasing over the phone sensitive personal data, call detail records, unless the customer provides a password, requires providers to notify customers immediately when changes are made to a customer's account and requires providers to notify their customers in the event of a breach of confidentiality. Service providers also must annually certify their compliance with these regulations, inform the Commission of **any** actions they have taken against data brokers, and provide a summary of the complaints they receive regarding the unauthorized release of CPNI. Today's action also ensures that law enforcement will have necessary tools to investigate and enforce illegal access to customer records.

While we work to create **an** environment in which market forces can thrive, the Commission must also act to protect consumers. With its strong approach to safeguarding consumer privacy, this item does just that. In particular, this item requires **express** consumer consent before a carrier may disclose a customer's phone records to joint venture partners or independent contractors **for** the purposes of marketing communications services. The former "opt-out" approach to customer consent, whereby a carrier may disclose a customer's phone records provided that a customer does not **expressly** withhold consent to such use, shifted too much of the burden to consumers, and has resulted in a much broader dissemination of consumer phone records. The "opt-in" approach adopted in this Order clearly is supported by the record, is consistent with applicable law, and directly advances our interest in protecting customer privacy.

Compliance with our consumer protection regulations is not optional for any telephone service provider. We need to take whatever actions are necessary to enforce these requirements to secure the privacy of personal and confidential information of American customers.

personal information from mobile communications devices.” These proposals may impose additional reporting and recordkeeping requirements on entities. **Also**, we seek comment on whether any of these proposals places burdens on small entities.”⁵⁷³ Entities, especially small businesses, are encouraged to quantify the costs and benefits of any reporting requirement that may be established in this proceeding.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

209. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for **small entities**.⁵⁷⁵

210. The Commission’s primary objective is to secure the privacy of customer information collected by telecommunications carriers and stored in mobile communications devices. We seek comment on the burdens, including those placed on small carriers, associated with related Commission rules and whether the Commission should adopt different requirements for small businesses.⁵⁷⁶

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

211. None.

⁵⁷³ See Further Notice at para. 72.

⁵⁷⁴ See Further Notice at paras. 68-72.

⁵⁷⁵ 5 U.S.C. § 603(c).

⁵⁷⁶ See Further Notice at paras. 68-72.

**STATEMENT OF
COMMISSIONER MICHAEL J. COPPS
APPROVING IN PART, DISSENTING IN PART**

Re: *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information: IP-Enabled Services; Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 96-115 and WC Docket No. 04-36

Few rights are as fundamental as the right to privacy in our daily lives, but this cherished right seems under almost constant attack. As recent abuses by unscrupulous data brokers and others illustrate, the Commission's existing customer proprietary network information (CPNI) rules have not adequately protected individual privacy. Recognizing the seriousness of the threat, Congress recently made pretexting a federal crime. Now it is time for the Commission to step up to the plate and update its rules to protect consumers from the dangers that portend when personal information is turned over to telephone carriers.

Today we take action to protect the privacy of American consumers by imposing additional safeguards on how telephone carriers handle the vast amount of customers' personal information that they collect and hold. We require passwords before call detail information is released over the phone. We require carriers to provide notice to customers when changes occur to their accounts. Very importantly, we require carriers to obtain prior consent from their customers before providing personal information to their joint venture partners and independent contractors. My personal preference remains that a customer's private information should never be shared by a carrier with any entity for marketing purposes without a customer opting-in to the use of his or her personal information. But today's order strikes an acceptable balance – a balance that will give consumers more confidence that their personal data will not be shared with certain third parties with whom the carriers have attenuated oversight. In 2002 I disagreed with the Commission's decision not to implement opt-in requirements for the use of consumers' personal information. In light of recent and well-documented abuses of consumer privacy, this recalibration of our rules is the least that we should do, and I very much appreciate the Chairman's willingness to take these important steps.

There is one aspect of this order, however, from which I must respectfully dissent. The Commission adopts a process by which customers could be left totally uninformed of unauthorized access to their CPNI for 14 days after a carrier reasonably determines there has been a records breach. Worse, the FBI and the U.S. Secret Service would have the ability to keep victims of these unauthorized disclosures in the dark even longer, perhaps indefinitely. As some have described it, it is akin to not telling victims of a burglary that their home has been broken into because law enforcement needs to continue dusting for fingerprints.

While I have always recognized the legitimate interests of law enforcement to be notified when there has been unauthorized access to a customer's CPNI, I also believe that consumers need to know when their private information has been accessed. There may be circumstances in which a delayed notification regime would be reasonable, for example, when an investigation of a large-scale breach of a database might be compromised because mass notification via the media is required. The Commission, however, adopts a rule that, in my opinion, is needlessly overbroad. It fails to distinguish those exigent circumstances in which delayed notification is necessary from what I believe to be the majority of cases in which immediate notification to a victim is appropriate. I continue to believe that notification to the victim of unauthorized access to their personal information will often actually aid law enforcement because the violator is frequently someone well known to the victim. If an unauthorized individual has gained access to personal telephone records involving victims of stalking or spousal violence, it won't be

**STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN
APPROVING IN PART, DISSENTING IN PART**

Re: *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information; IP-Enabled Services, Report and Order and Further Notice of Proposed Rulemaking. CC Docket No. 96-115 and WC Docket No. 04-36*

Through this proceeding, we address an issue of immediate personal importance to American consumers, the protection of sensitive information that telephone companies collect about their customers. This information can include some of the most private personal information about an individual, and failure to safeguard it can result in highly invasive intrusions into both the personal and professional lives of consumers. When someone gets hold of who you are calling, and for how long, it is like letting strangers pick your brain about your friends, plans or business dealings. So, I am pleased to support much of this Order, which takes meaningful steps to shut off the information drain that has left so many customers exasperated.

Congress recognized the sensitivity of this information in the Telecommunications Act of 1996 when it prohibited phone companies from using or disclosing customer proprietary network information without the customer's approval. It charged the Commission with enforcing this privacy protection and the Commission previously adopted a set of rules designed to ensure that telephone companies have effective safeguards in place.

Today's action comes in response to the chorus of evidence detailing the need for greater privacy measures. Indeed, this proceeding flows from a petition filed by a watchful public interest group, the Electronic Privacy Information Center (EPIC), which alerted the FCC during the summer of 2005 to the troubling trend of telephone call records being made available on the Internet without customers' knowledge or consent. As EPIC then made clear to the Commission and as the record to this proceeding has borne out, disclosure of these records is far more than a mere annoyance; indeed, it can lead to tragic consequences.

So, our efforts here to strengthen our rules are critical and time sensitive. This Order takes several important steps to tighten our rules and provide greater security for sensitive consumer records. Requiring more rigorous customer authentication, giving customers notice of account changes, and applying a more consumer-friendly approach to sharing of customer data should all serve to improve customers' control over their private data. As documented by EPIC, the sheer volume of customer information illegally available for public consumption made clear just how porous the existing firewalls and safeguards have been. At the same time, the Commission strikes a balanced approach in this Order, giving consumers greater ability to control their own information while also giving companies a degree of flexibility in how they implement safeguards. In this regard, I would like to thank Chairman Martin and the Wireline Competition Bureau for their attention to this item. Their extra work to fine tune the rules we adopt here will surely improve their functioning for consumers and providers alike.

Although much of this Order does exactly what Congress contemplated – putting the customer in control – there is one critical aspect where this Order falls short. Despite the Order's conclusion that customers should have notice of unauthorized disclosure of customer information, this Order set up a process which can result in the unnecessary and even indefinite delay of consumer notification without any accountability. Under these rules, the Commission gives the Federal Bureau of Investigation a potentially open-ended ability to delay customer notification of security breaches. While I expect that the FBI will work as quickly as possible to identify any investigative issues, I find no statutory basis in the Act for granting the FBI a blank check to delay notice to customers. I can understand the need for delay

the carrier or the law enforcement agency – but the victims – who are in the best position to know when and how harm may be heading toward them.

Given the scope of the procedures adopted here – procedures which pre-empt state consumer privacy protections to the extent that they require immediate notification to consumers when their privacy has been violated – the delayed notification proposal would have benefited from greater scrutiny and analysis; particularly with respect to law enforcement's apparent unfettered ability to extend the period of non-notification. This seems especially important given the recent and troubling report by the Justice Department's own Inspector General raising serious questions as to whether the FBI properly followed the law in obtaining access to the telephone records of thousands of consumers. Our approach here requires more balance than the instant item provides.

Finally, while we make positive strides today, I look forward to taking prompt action on the proposals in the Further Notice regarding additional passwords, audit trails and data retention limits. When the stakes for misuse of our personal information are so high, the Commission must continue to be extraordinarily vigilant to ensure that the privacy of consumers is protected.

**STATEMENT OF
COMMISSIONER DEBORAH TAYLOR TATE**

Re: *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information; IP-Enabled Services*, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 96-115 and WC Docket No. **04-36**

I have said time and again that the brokerage of personal information – whether it be personal identity, financial records, or a list of phone calls – is intolerable. “Pretexting” is nothing more than stealing; robbing consumers in a variety of slick ways of their most personal information. Indeed the law places a duty on telecommunications providers to protect this information and today, we take important steps to better secure private customer telephone records.

While I generally prefer market-based solutions to government intervention, I agree with my colleagues that the widespread actions of pretexters to obtain this type of personal customer information from carriers, required this action on our part.

I fully support strict requirements governing treatment of this sensitive data. However, I hope that the broad scope of our actions will not impact the ability of both companies and consumers to benefit from marketing information which may lead to lower prices or competitive bundled packages. An approach limiting the very strict “opt-in” obligations only to call detail records may have cured the problem at hand in a less burdensome manner.

In the end, however, customer privacy must take precedence. I am pleased that the rules we adopt today will go a long way towards closing off the avenues that information snatchers have repeatedly used to violate the privacy of consumer phone records.

in extraordinary circumstances identified by law enforcement, **but** automatic delays coupled with unlimited **and** unchecked extensions **are** not appropriate. Particularly given that timely notice to consumers may be essential for those customers to take protective action, I must dissent from this portion of the Order.

Finally, even as we work here to improve our rules *and* as Congress considers additional safeguards, we must also re-double our efforts to address abuses of **this** private information. Swift enforcement action against companies that **are** violating our rules **will** be essential if we are to live up to our duty under the Act to protect customers' sensitive and private information.

**STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL**

Re: *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information; IP-Enabled Services.*
Report and Order and Further Notice of Proposed Rulemaking. CC Docket No. 96-115 and WC Docket No. **04-36**

Pi-electin? has become the biggest **threat** to consumer security in the Information Age. Today's action further enhances the Commission's ability to protect consumers from these advanced fraudulent pi-actices by strengthening our existing rules. Among the new requirements imposed on carriers, the decision prohibits carriers from releasing call detail information during customer-initiated telephone calls except when **the** customer pi-ovides a password. It also precludes carriers from disclosing CPNI to independent contractors and joint venture partners without the customer's specific consent, and requires carriers to notify customers of all account changes and unauthorized disclosures of CPNI.

We **must** take all necessary steps to protect unauthorized disclosure of this sensitive data, keeping in mind that pretexters are constantly trying new techniques **to** defraud consumers. **In** view of the pretextera' malevolent intent, the Commission will vigilantly pressure carriers to **take** precautions **to** stay ahead of the pretexters. However, our rules should strike a careful balance and should also guard against imposing over-reaching and unnecessary requirements that could cause unjustified burdens and costs on carriers. **In** the spirit of finding that balance; the *Further Notice* seeks comment on possible additional protections against unauthorized disclosure of CPNI. I look forward **to** reviewing the comments **on** those proposals.